GRAIN TRANSPORTATION REPORT

Agricultural Marketing Service
United States Department of Agriculture

AUGUST 21, 2001

IP Grain Traceability and Handling Present Challenges and Opportunities (3d of 3 parts). Of the topics discussed during the recent U.S. Grains Council Conference, the traceability and handling of identity-preserved (IP) grains may be most relevant for the future of U.S. agricultural marketing and transportation.

Agricultural consultant, Jim Mock, referred to food **traceability** as the "next agricultural revolution," and emphasizes that we can no longer live in a commodity-based system. Advances in agriculture and medicine have had much to do with increased life expectancy in the United States and improved health. However, with improvements in seed, fertilizers, chemicals, genetics, food handling, and biotechnology, as well as advances in combining the qualities of food and medicine, nutrients, and nutraceuticals, such as golden rice (with its added beta-carotene and vitamin A), come greater challenges to agriculture. Mock believes that the future of agriculture will be in value-added specialty crops. However, without an agreement on standards and cost-effective transportation, the idea of value added will be useless.

The major challenge, according to Mock, will be in market development and bringing together producers and buyers of specialty products. Markets will develop but no longer be geographically defined, further challenging the distribution system, said Mock. Also, because consumers will increasingly demand safe food and access to more information, it will be agriculture's role to develop a "data trail" to follow product movement from the inputs of production to the consumer. Mock emphasized the importance of keeping in mind consumer needs and the need for producing and exporting more value and seeing the demand for more information as an opportunity rather than an obstacle. (www.cropverifeye.com)

Similarly, Rob Rye, Director of Value Enhanced Programs, Conagra Trade Group, discussed the handling of **IP products**, again emphasizing the need to think of grain trade in terms of consumer demand instead of supply volumes. Traditionally, IP handling has been based on channeling; that is, each shipment maintaining the same quality, based on compositional traits (e.g., starch, protein content, etc.) and managerial traits (e.g., low-stress crack corn and organic crops). Alternately, new technology is determining that IP handling be based on agronomic input traits, such as Round-Up Ready products (tolerates Round-up herbicide) (www.monsanto.com) and Bt (Bacillus thuringiensis) corn (produces an insecticide) (**www.findarticles.com)**. The focus has changed from keeping a specific trait in to keeping a specific trait or type of grain out of the shipment.

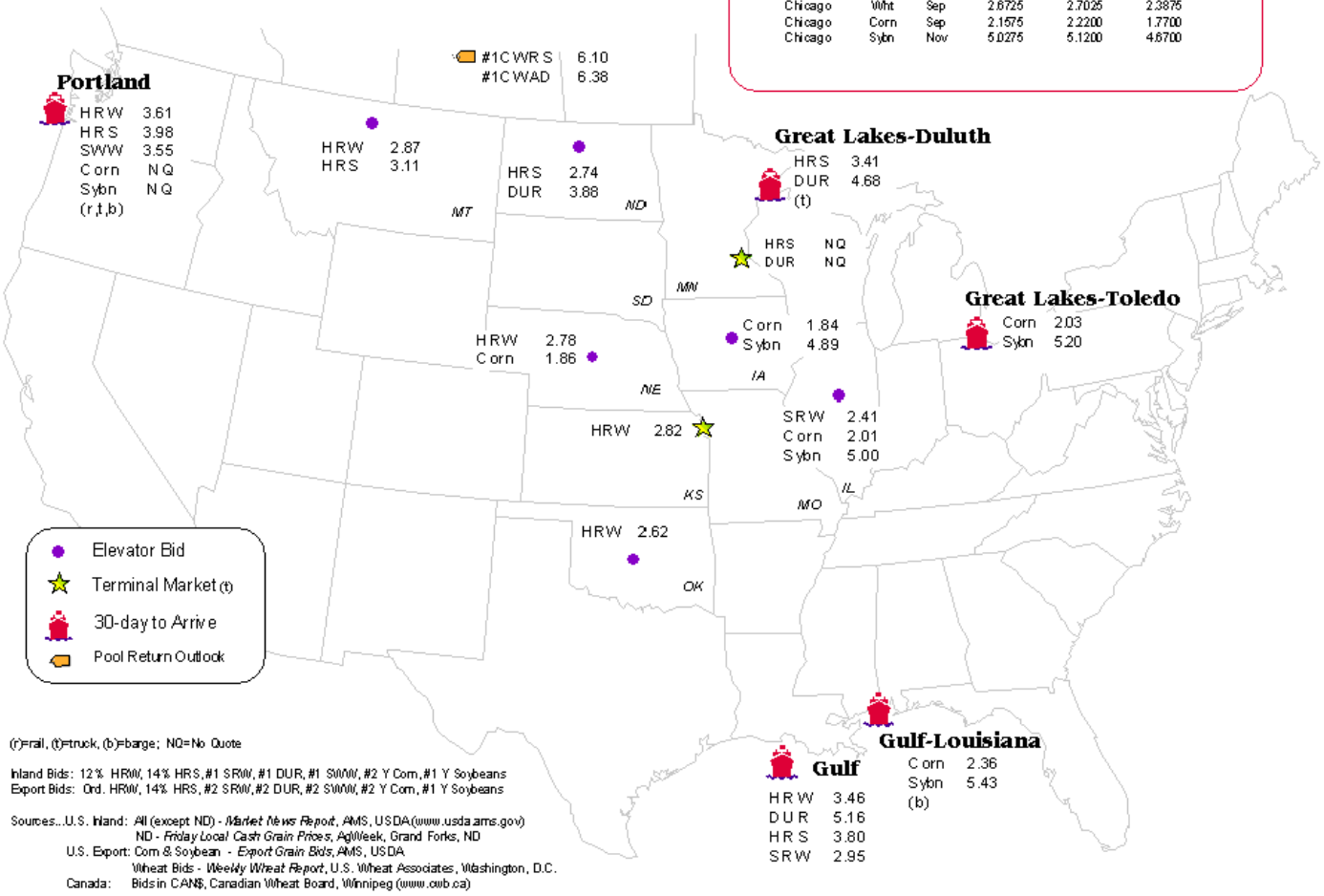
IP handling is changing, according to Rye. There is more focus on seed and crop production, border strips between fields, what was planted 1-2 years before in a given field, and cleanliness of farm equipment. In addition, traits (as well as transportation) will often be determined by where the crop is produced. There should be an open sharing of information and value within the supply chain, with each participant aware of what the other is doing. There is an increasing need for testing and documentation. In this regard, costs may also increase, since filling all holds of a vessel differently, for instance, will increase documentation. Other measurable costs may include facilities and equipment and rejected shipments, the latter of which grow as the value of the shipment increases. Opportunity costs, although harder to quantify, may include less flexibility and more time needed for maintaining specific traits during handling.

To summarize, Rye stated that IP handling programs should be process based and a seamless coordination of efforts, not separate activities. In addition, Rye emphasized that programs should be monitored from start to finish. He said that testing and certification were often done after mistakes had occurred and become difficult to rectify. Programs should also be practical, flexible, and fairly priced, based on the size of the program.

The conference concluded with discussions of several promising alternatives and new markets for raw agricultural products. Dr. Bruce Dale, Michigan State University, discussed the concept of process engineering and **biobased industrial products**, such as liquid fuels, chemicals, lubricants, plastics, and building materials, all developed from renewable plant resources. Although agricultural inputs may be inexpensively grown, the cost to convert them to industrial products remains high. For this reason, long-term investment in researching the conversion process is necessary, specifically in providing "proof of concept" testing. Dr. Dale also addressed the issue of food supplies and food prices when considering the potential competition with markets for biobased products and biofuels such as ethanol. He noted that there will more likely be synergies rather than competition between bioproducts and food. Worldwide, crop residue production is at least 3.6 trillion pounds per year, such as with sugar cane bagasse, rice straw, and corn stover, all useful for biobased products. (bdale@egr.msu.edu)

Grain Bid Summary

Futures:			08/16/2001	Week Ago 08/09/2001	Year Ago 08/18/2000
Kansas City	Wht	Sep	2.9675	3.0075	2.7975
Minneapolis	Wht	Sep	3.0525	3.0825	2.9525
Minneapolis	Dur	Sep	4.5000	4.5000	n.a.
Chicago	Wht	Sep	2.6725	2.7025	2.3875
Chicago	Corn	Sep	2.1575	2.2200	1.7700
Chicago	Sybn	Nov	5.0275	5.1200	4.6700

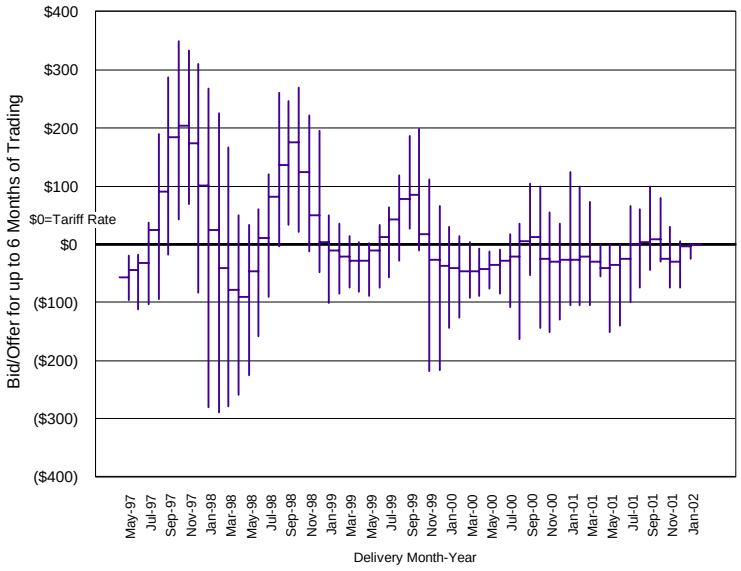


(r)=rail, (t)=truck, (b)=barge; NQ=No Quote

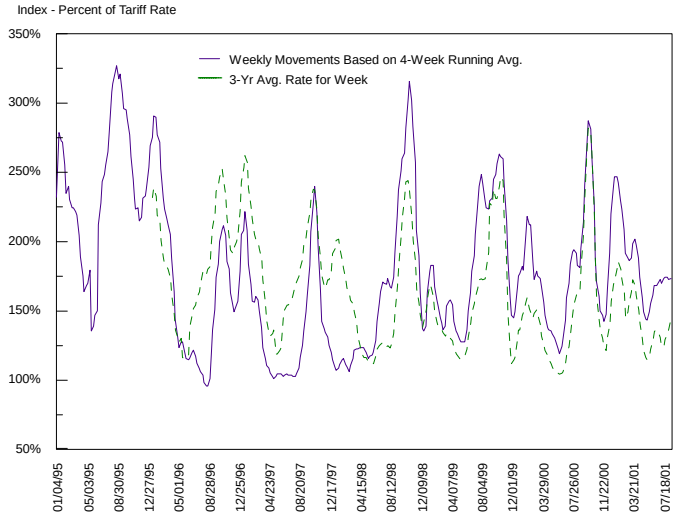
Inland Bids: 12% HRW, 14% HRS, #1 SRW, #1 DUR, #1 SWW, #2 Y Corn, #1 Y Soybeans
Export Bids: Ord. HRW, 14% HRS, #2 SRW, #2 DUR, #2 SWW, #2 Y Corn, #1 Y Soybeans

Sources...U.S. Inland: All (except ND) - *Market News Report*, AMS, USDA (www.usda.ams.gov)
ND - *Friday Local Cash Grain Prices*, AgWeek, Grand Forks, ND
U.S. Export: Corn & Soybean - *Export Grain Bids*, AMS, USDA
Wheat Bids - *Weekly Wheat Report*, U.S. Wheat Associates, Washington, D.C.
Canada: Bids in CAN$, Canadian Wheat Board, Winnipeg (www.cwb.ca)

Secondary Rail Market Bids



Spot Barge Rate - Illinois River



Rail Car 'Auction' Offerings

Delivery for:	Sep-01		Nov-01	
	Offered	% Sold	Offered	% Sold
BNSF-COT	11,689	65%	14,109	60%
UP-GCAS	5,400	10%	no offer	

Source: Transportation & Marketing /AMS/USDA; www.bnsf.com; www.uprr.com

Secondary Rail Car Market

Average Premium/Discount to Tariff, $/Car - Last Week

	Delivery Period			
	Aug-01	Sep-01	Oct-01	Nov-01
BNSF-GF	$40	$39	$40	$12
UP-Pool	$43	$50	$50	$(14)

Source: T&M/AMS/USDA. Data from Atwood/ConAgra., Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.;
GF=Guaranteed Freight, GEEP=Guaranteed Eqpt. Exchange, Pool=Guaranteed Pool

note... bids listed are market INDICATORS only & are NOT guaranteed prices, missing value=No Bid Quoted

Railroad Car 'Auction' Results

Average Premium/Discount to Tariff, $/Car - Last Auction

Delivery for:	Sep-01	Oct-01	Nov-01
COT/N. Grain	sold out	$3	$0
COT/S. Grain	$1	$0	$0
GCAS/Region 2	$3	no offer	no offer
GCAS/Region 4	no bid	no offer	no offer

Source: T&M/AMS USDA. Data from www.bnsf.com, www.uprr.com,
(COT=Certificate of Transportation; GCAS=Grain Car Allocation System)

Southbound Barge Freight Nominal/Cash Basis Values

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

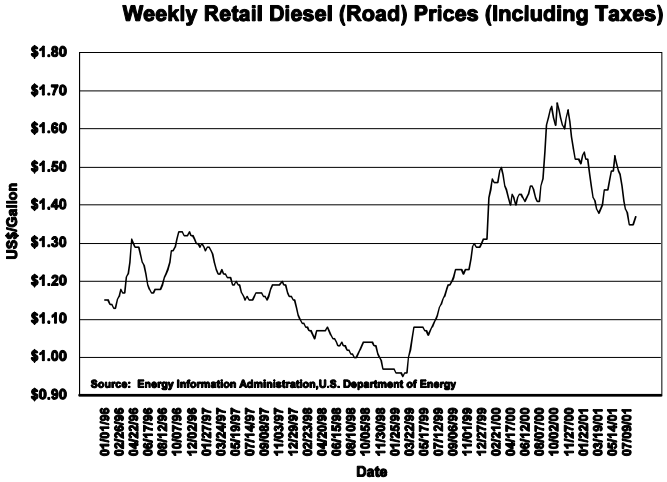
Week ended	River/Region	Contract Period	Rate Futures	Rate Cash
08/22/01	St. Louis	Sept	197	200
		Nov	160	160
		Jan	135	140
		Mar	139	140
		May	136	0
	Illinois River	Sept	225	220
		Nov	190	175
		Jan	0	195
		Mar	0	175
		May	0	0

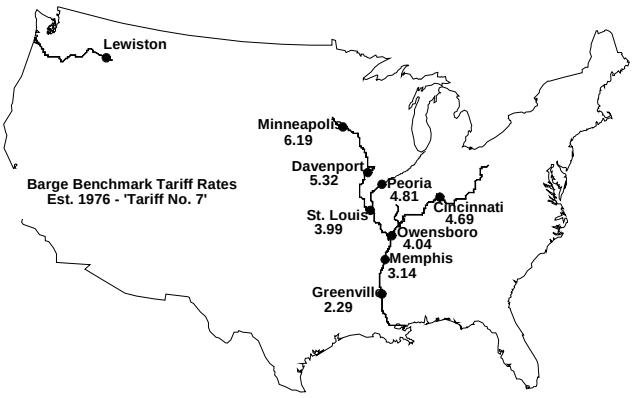
Source: St. Louis Merchants Exchange

Southbound Barge Freight Spot Rates

	8/15/01	8/8/01	Sept '01	Nov '01
Twin Cities	230	215	256	249
Mid-Mississippi	206	180	240	194
Illinois River	187	163	231	183
St. Louis	168	135	205	160
Lower Ohio	173	149	230	178
Cairo-Memphis	162	123	203	156

Source: Transportation & Marketing /AMS/USDA
nq=no quote;

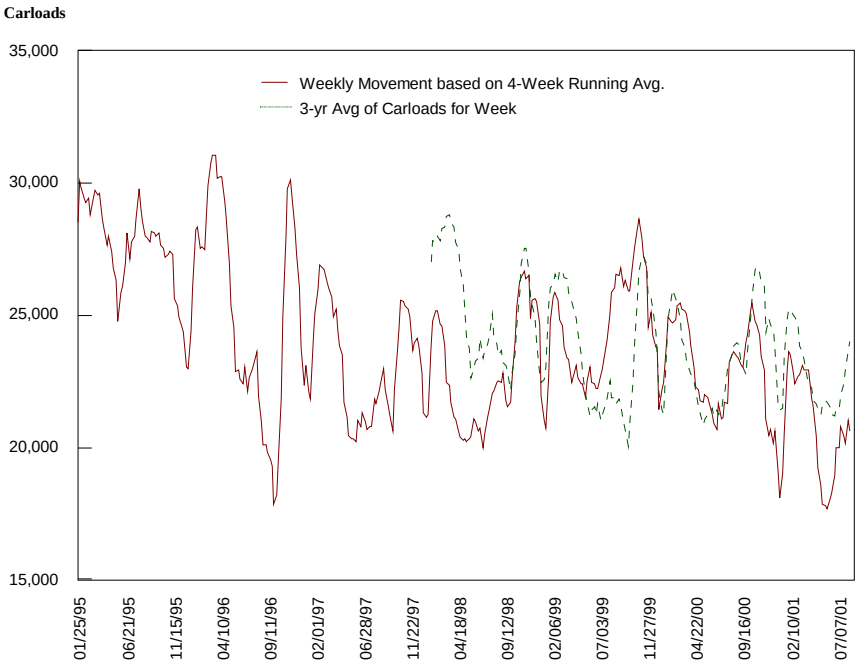




Grain Car Loadings for Class I Railroads

Class I Railroad Grain Car Loadings	
Week Ending:	Carloads
7/28/01	20,568
08/04/01	21,802
08/11/01	20,573
Year to Date - 2001	669,301
Year to Date - 2000	740,722
Total 2000	1,188,917
Total 1999	1,270,375

Source: Association of American Railroads



Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated

	East				West			Canada	
	Conrail	CSXT	IC	NS	BNSF	KCS	UP	CN	CP
08/11/01	0	2,278	0	2,602	8,071	531	7,091	4,208	4,193
This Week Last Year	0	2,383	1,828	3,033	8,425	710	6,298	2,200	4,102
2001 YTD	0	95,851	0	98,749	249,311	14,795	210,595	157,216	141,342
2000 YTD	0	88,711	57,324	93,522	249,188	17,503	234,474	85,934	146,409
2000 Total	0	147,708	70,155	153,905	425,849	26,515	364,785	160,749	239,670
1999 Total	15,522	132,157	88,056	138,379	465,088	33,911	398,262	121,381	206,328

Source: Association of American Railroads

Tariff Rail Rates for Unit Train Shipments

August 2001

Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
08/06/01	45560	Wheat	Minneapolis, MN	Houston, TX	$2,050	$22.60	$0.62
08/06/01	43521	Wheat	Minneapolis, MN	Portland, OR	$3,877	$42.74	$1.16
08/06/01	46540	Wheat	Kansas City, MO	Houston, TX	$1,650	$18.19	$0.50
08/06/01	43586	Wheat	Kansas City, MO	Portland, OR	$4,240	$46.74	$1.27
08/06/01	43581	Wheat	Omaha, NE	Portland, OR	$3,905	$43.04	$1.17
08/06/01	31040	Corn	Minneapolis, MN	Portland, OR	$2,900	$31.97	$0.81
08/06/01	31035	Corn	Kansas City, MO	Portland, OR	$2,700	$29.76	$0.76
08/06/01	31040	Corn	Omaha, NE	Portland, OR	$2,700	$29.76	$0.76
08/06/01	61180	Soybean	Minneapolis, MN	Portland, OR	$2,730	$30.09	$0.82
08/06/01	61180	Soybean	Omaha, NE	Portland, OR	$2,480	$27.34	$0.74
05/01/98	61180	Soybean	Omaha, NE	Portland, OR	$2,780	$25.23	$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

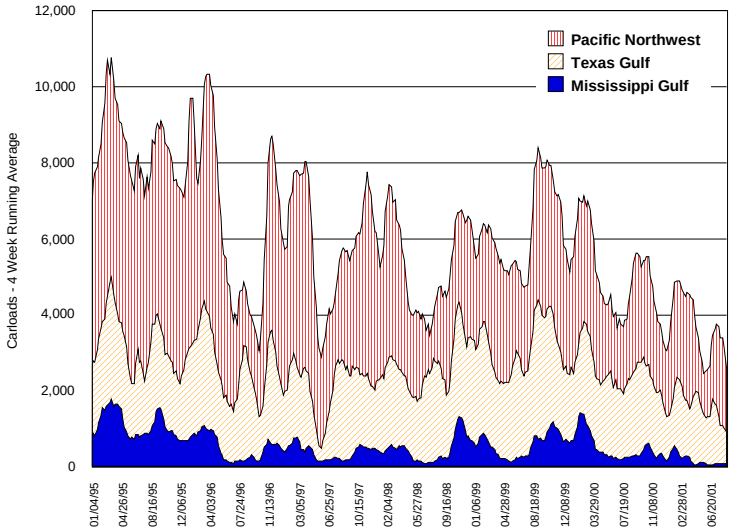
Rail Deliveries to Port
Carloads

	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf
Week Ending:				
07/11/01	140*	879	2,345	309
07/18/01	101*	956	2,460	470
07/25/01	7*	998	2,703	54
08/01/01	104*	1,097	1,774	463
08/08/01	98*	967	2,361	459
08/15/01	102*	658*	1,712	438
YTD 2001	5,817*	47,776*	69,623	16,769
YTD 2000	18,926	67,207	83,054	8,253
Total 2000	25,675	105,308	129,464	14,816
Total 1999	30,038	132,069	161,492	14,446

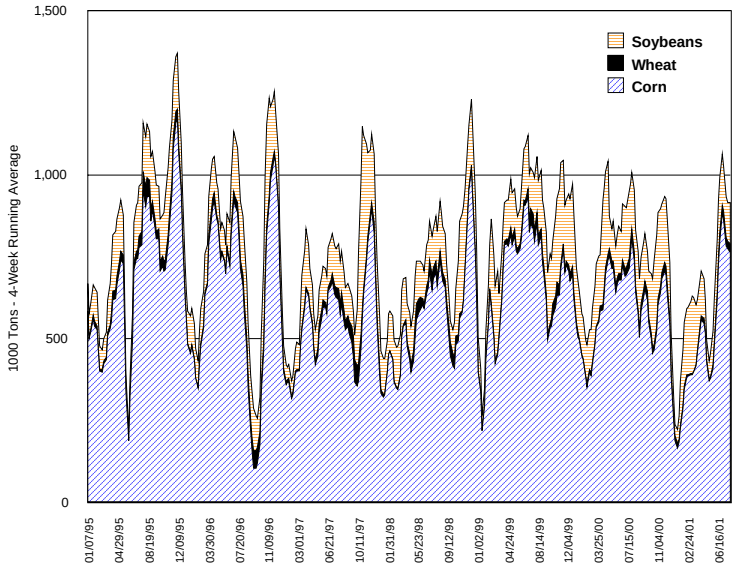
Source: Transportation & Marketing/AMS/USDA

(*) Incomplete Data
(**) Revised Data

Rail Deliveries to Port



Barge Movements - Locks 27



Barge Grain Movements
for week ending 8/4/01*

	Corn	Wht	Sybn	Total
	1,000 Tons			
Mississippi River				
Rock Island, IL (L15)	340	23	32	395
Winfield, MO (L25)	686	3	90	778
Alton, IL (L26)	915	9	126	1,052
Granite City, IL (L27)	914	25	123	1,064
Illinois River (L8)	226	1	42	269
Ohio (L52)	17	20	5	56
Arkansas (L1)	0	38	2	40
2001 YTD	18,279	1,409	5,506	26,412
2000 YTD	20,226	1,424	5,643	28,365
Total 2000	33,482	2,518	10,327	48,247
Total 1999	36,711	2,883	9,771	51,887

Miss YTD: Calendar year totals include Miss/27, Ohio/52 and Ark/1.
Source: U.S. Army Corp of Engineers; * will be updated next week

U.S. Export Balances (1,000 Metric Tons)

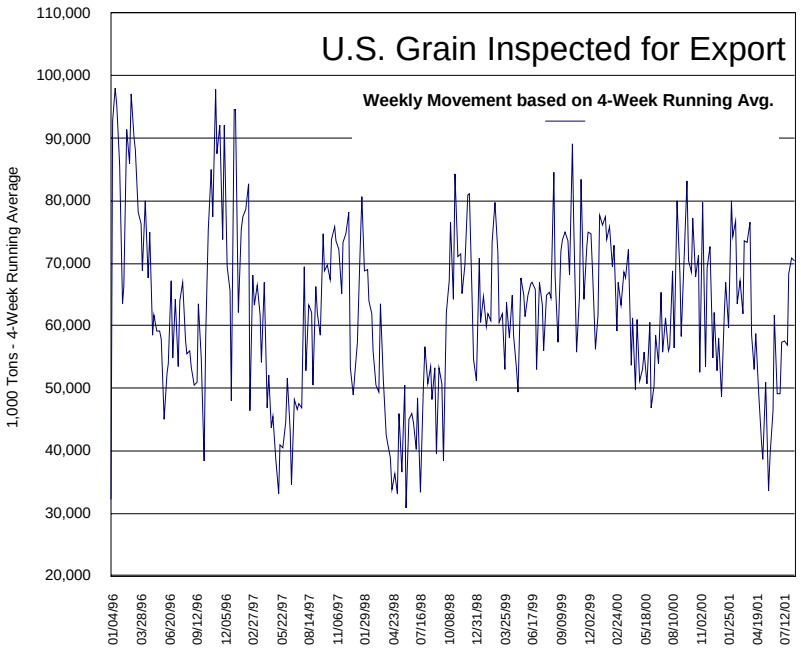
	Wheat						Corn	Soybean	Total
	HRW	*SRW*	*HRS*	*SWW*	*DUR*	*All*			
Unshipped Exports-Crop Year									
08/09/01	1,398	1,047	974	474	343	4,235	9,031	4,558	17,824
This Week Year Ago	1,273	727	978	963	308	4,248	9,237	4,214	17,699
Cumulative Exports-Crop Year									
00/01 YTD	1,375	834	866	531	204	3,809	43,648	26,586	74,043
99/00 YTD	1,915	1,030	1,029	778	201	4,952	44,949	17,713	67,614
97/98 Total	9,858	4,710	6,305	5,413	1,232	27,518	37,220	24,516	89,254
96/97 Total	7,387	3,645	7,864	6,105	963	25,965	44,476	24,501	94,942

Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov) Crop Year:Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31

Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons

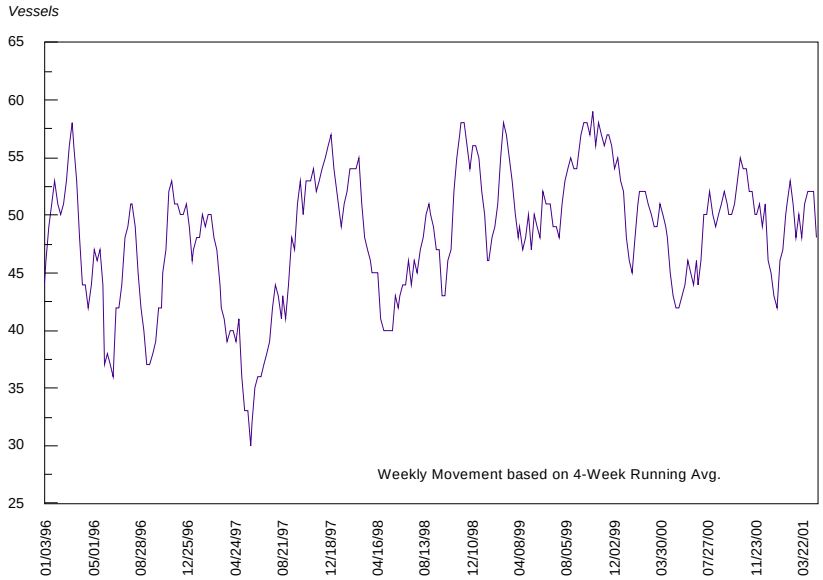
	Pacific Region			Mississippi Gulf			Texas Gulf		
	Wheat	*Corn*	*Soybean*	*Wheat*	*Corn*	*Soybean*	*Wheat*	*Corn*	*Soybean*
08/16/01	189	161	15	134	947	173	211	1	7
2001 YTD	5,955	3,421	1,329	3,639	21,534	9,332	3,502	182	918
2000 YTD	5,884	4,060	778	4,080	21,715	10,564	4,218	221	828
% of Last Year	60%	57%	78%	54%	61%	52%	51%	39%	91%
1998 Total	10,838	4,373	651	5,048	31,330	14,917	7,270	562	1,392

Source: Federal Grain Inspection Service YTD-Year-to-Date



Select Canadian Ports - Export Inspections
1,000 Metric Tons, Crop Year

	Wheat	Durum	Barley
Week Ended: 8/9/01			
Vancouver	6,300	521	1,266
Prince Rupert	2,053		2
Prairie Direct	1,308	377	518
Thunder Bay	726	235	127
St. Lawrence	2,540	2,295	25
2000 YTD Exports	12,927	3,428	1,938
1999 YTD Exports	14,569	3,537	1,756
% of Last Year	89%	97%	110%



Gulf Region
Vessels Loaded
- Past 7 Days-

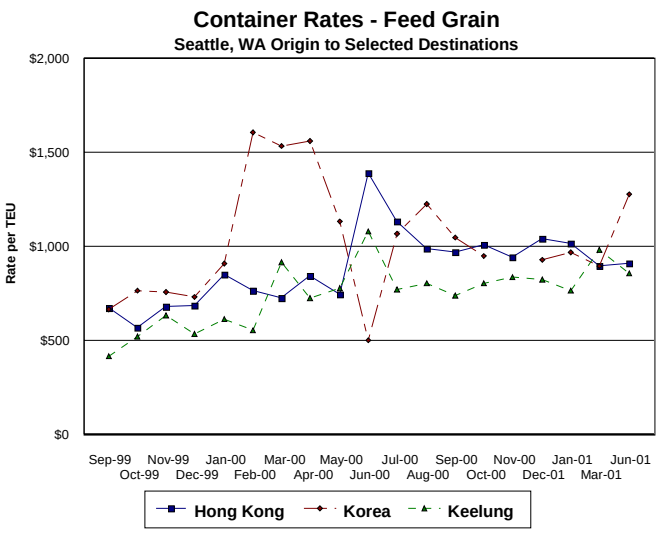
Port Region Ocean Grain Vessels

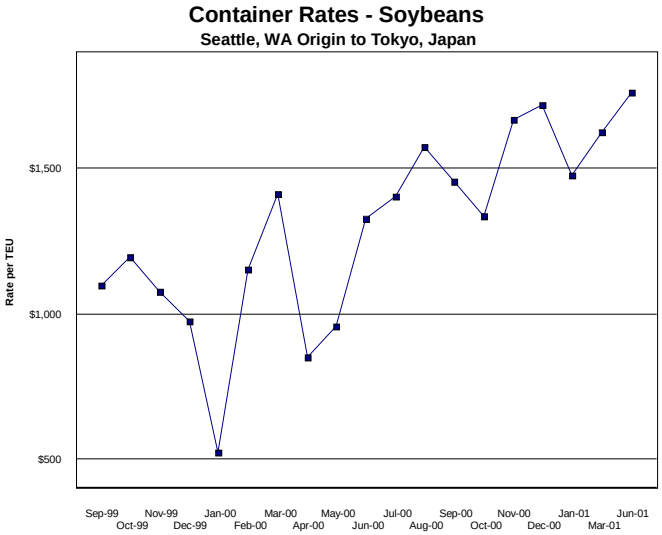
	Gulf			Pacific Northwest			Vancouver, B.C.		
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	Loaded 7-Days	Due Next 10-Days	In Port	Loaded 7-Days	Due Next 10-Days
08/09/01	39	48	69	9			39	48	69
08/16/01	35	52	56	9			35	52	56
1999 Range	(14..47)	(39..65)	(34..80)	(6..18)			(2..20)	(2..15)	(0..9)
1998 Range	(19..62)	(34..64)	(40..93)				(1..19)	(3..14)	(0..10)
1999 Avg	32	52	65				9	9	3
1998 Avg	40	48	61				10	9	3
1997 Avg	33	45	58						

Source: Transportation & Marketing /AMS/ USDA

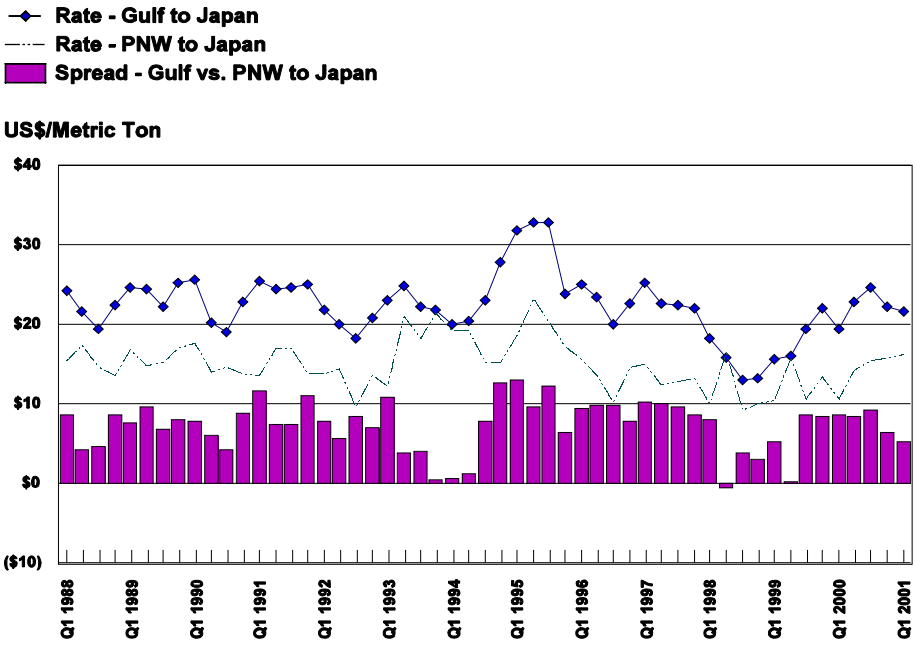
Container Ocean Freight Rates

Monthly Weighted Averages Based on Shipping Line Monthly Mkt. Share





Source: Transportation & Marketing/AMS/USDA



Quarterly Ocean Freight Rates

Quarterly Ocean Freight Rates
Average Rates & Percentage Changes, U.S. Dollars/Metric Ton - Basis

	2001 2nd Qtr	2000 2nd Qtr	% Change
Gulf to			
Japan	$22.31	$22.84	-2%
Mexico	$17.84	$16.58	8%
Venezuela	$14.76	$11.34	30%
N. Europe	$16.93	$15.50	9%
N. Africa	$19.52	$20.91	-6%

	2001 2nd Qtr	2000 2nd Qtr	% Change
Pacific NW to			
Japan	$13.50	$14.37	-6%
Red Sea/ Arabian Sea		$33.46	
Argentina to			
N. Europe	$19.68	$18.96	4%
Japan	$26.62	$26.57	-

Source: Transportation & Marketing/AMS/USDA; (*) rates shown are for metric ton (2,204.62 lbs.=one metric ton)

Ocean Freight Rates (Select Locations) - week ending 8/18/01

Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate ($Ton)
Duluth	Algeria	Heavy Grain	Aug 20/30	17,000	$30.50
Gulf	Egypt	Heavy Grain	Aug 20/30	60,000	$10.55
PNW	Djibouti	Wheat	Sep 5/15	26,680	$34.00
PNW	N. Korea	Wheat	Aug 25/Sep 5	25,000	$26.90
Parana River	Italy	Grains	August 16/20	39,000	$16.75

Source: Maritime Research Inc.; rates shown are for long ton (2,240 lbs.=one long ton), F.O.B., except where otherwise indicated; op=option